

# SYSTEM AND METHOD FOR MATCHING MULTI-ATTRIBUTE AUCTION BIDS

## ABSTRACT OF THE DISCLOSURE

5546A7 A system and a method for matching multi-attribute auction bids are disclosed. A set of multi-attribute bids or bid values are collected from one or more buyers and one or more sellers. The set of bid values may include variances from nominal bid values. Buyer and seller bids are generated from the set of buyer and seller multi-attribute bid values after predetermined attribute values, if any, are added. A pair of bids between each buyer and each seller having a highest surplus is selected. The method generates a weighted bipartite graph comprising buyer nodes and seller nodes and an edge between each buyer node and each seller node, each edge having the highest surplus of the pair of bids between the buyer and seller as a weight. The maximal weighted matching bids from the highest surplus pairs of bids are determined using the weighted bipartite graph.